PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau

Serial No. 09/808,693
Reference 1 of 8

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : C12Q 1/68 — A1

(11) International Publication Number: WO 98/44151

(43) International Publication Date: 8 October 1998 (08.10.98)

(21) International Application Number: PCT/GB98/00961

(22) International Filing Date: 1 April 1998 (01.04.98)

(30) Priority Data:

9706528.8	1 April 1997 (01.04.97)	GB
9706529.6	1 April 1997 (01.04.97)	GB
9713236.9	23 June 1997 (23.06.97)	GB
9713238.5	23 June 1997 (23.06.97)	GB

(71) Applicant *(for all designated States except US)*: GLAXO GROUP LIMITED [GB/GB]; Glaxo Wellcome House, Berkeley Avenue, Greenford, Middlesex UB6 0NN (GB).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: KAWASHIMA, Eric [US/CH]; Serono Pharmaceutical Research Institute S.A., 14, chemin de Aulx, CH-1228 Plan-les-Ouates (CH). FARINELLI, Laurent [CH/CH]; 15, chemin de Aulx, CH-1256 Troinex (CH). MAYER, Pascal [FR/CH]; Serono Pharmaceutical Research Institute S.A., 14, chemin de Aulx, CH-1228 Plan-les-Ouates (CH).

(74) Agent: GLAXO WELLCOME PLC; Glaxo Wellcome House, Berkeley Avenue, Greenford, Middlesex UB6 0NN (GB).

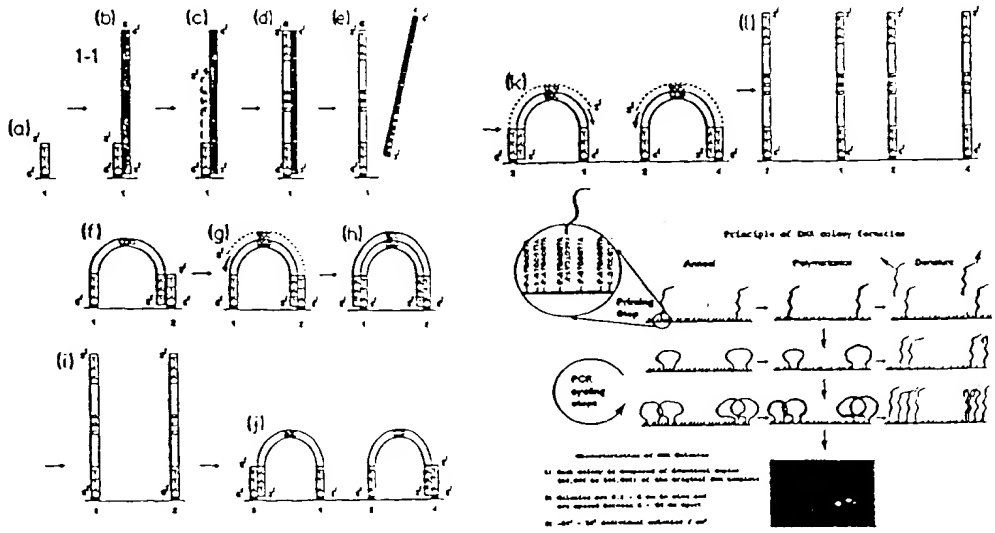
(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).

Published

With international search report

Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(54) Title: METHOD OF NUCLEIC ACID AMPLIFICATION



(57) Abstract

A nucleic acid molecule can be annealed to an appropriate immobilised primer. The primer can then be extended and the molecule and the primer can be separated from one another. The extended primer can then be annealed to another immobilised primer and the other primer can be extended. Both extended primers can then be separated from one another and can be used to provide further extended primers. The process can be repeated to provide amplified, immobilised nucleic acid molecules. These can be used for many different purposes, including sequencing, screening, diagnosis, *in situ* nucleic acid synthesis, monitoring gene expression, nucleic acid fingerprinting, etc.